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OKADA C/O KEATING & BENNETT, LLP 8180 GREENSBORO DRIVE SUITE 850 MCLEAN, VA 22102			EXAMINER EL-ZOOBI, MARIA	
			ART UNIT 2614	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/527,916	<b>Applicant(s)</b> SAHASHI, NOZOMU	
	<b>Examiner</b> Maria El zoobi	<b>Art Unit</b> 4178	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>All</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: The phrase deaf-mute could be deemed offensive to the deaf community.

(see. <http://www.nad.org/deafandddumb>),

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 11-12, 14-15, 19 and 21 are rejected under 35 U.S.C. 102(e) as being unpatentable by Bravin et al US (2003/0069997).

Regarding claim 11, Bravin discloses, a sign language interpretation system (Fig. 1, el. 10) which interconnects a videophone terminal for deaf-mute persons used by a deaf-mute person capable of using sign language (Paragraph 0018, lines 3-5) , a videophone terminal for non-deaf-mute persons used by a non- deaf-mute person incapable of using sign language (Paragraph 0018 and Paragraph 0015, lines 12-14)

and a videophone terminal for sign language interpreters used by a sign language interpreter in order to provide sign language interpretation in a conversation between a deaf-mute person and a non-deaf- mute person over a videophone (Paragraph 0018 Fig. 5, el. 52 and Paragraph 0033, line 2)

said sign language interpretation system comprising:

communications means individually equipped with a line interface for deaf-mute persons to which a deaf-mute person terminal is to be connected (Fig. 2, el. 30 and 20)

a line interface for non-deaf-mute persons to which a non-deaf-mute person terminal is to be connected (Fig. 2, el. 35 and 20)

and a line interface for sign language interpreters to which a sign language interpreter terminal is to be connected (Paragraph 0033, lines 2-3 and Fig. 5, el. 22)

said communications means includes a function to simultaneously perform: a function to synthesize at least a video from said line interface for non-deaf-mute persons and a video from said line interface for sign language interpreters and transmit the resulting video to said line interface for deaf-mute persons (in Fig. 1 we have both the caller and the callee have video synthesization capabilities in two way communication through the interpreter; in Paragraph 0030; Bravin discloses that the communication between the caller and the callee could happen using any communication means associated with the communication device .i.e. video; in Paragraph 0018; Bravin teaches that the hearing person voices back to the deaf person through the interpreter who sign to the deaf person what he hears from the hearing

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person; therefore, based on Bravin suggestions of using the video mode that the hearing person contact the interpreter through a video connection and the interpreter will communicate, resulting video "i.e. translated voice into sign language" with the deaf person through video connection too using the portal system; Fig. 3).

a function to transmit at least a video from said line interface for deaf-mute persons and an audio from said line interface for sign language interpreters to said line interface for non-deaf-mute persons (Paragraph 0018)

a function to transmit at least a video from said line interface for deaf-mute persons and an audio from said line interface for non-deaf-mute persons to said line interface for sign language interpreters (Paragraph 0018)

and connection means (Fig. 4, el. 20) equipped with a sign language interpreter registration table (Fig. 4, el. 70) in which the terminal number of a sign language interpreter is registered (since the first and second device contact the interpreter through the portal system in order to complete a connection; it is necessary that the portal system has a registered number/address of the interpreter device; Paragraph 0021 and 0022)

said connection means including: a function to accept a call to said line interface for deaf-mute persons or said line interface for non-deaf-mute persons and connect the calling terminal ( Paragraph 0016)

a function to prompt said calling terminal to enter the terminal number of the called terminals (Paragraph 0016)

a function to extract the terminal number of a sign language interpreter from said sign language interpreter registration table (based on the personal communication preferences table in Fig. 6, the portal system will contact the preferred interpreter terminal and connect the caller to that terminal; Paragraph 0036, 0037 and 0038)

a function to call and connect the sign language interpreter terminal by using said extracted terminal number of the sign language interpreter from said line interface for sign language interpreters (Fig. 5, el. 20 and 22; the portal system based on the caller preferences will choose the interpreter and call and contact that terminal through the interface 22)

and a function to call and connect the called terminal by using said acquired called terminal number, from said line interface for the non-deaf-mute person terminal in case said calling terminal is connected to the line interface for deaf-mute persons (Paragraph 0016), or from said line interface for the deaf-mute person terminal in case said calling terminal is connected to the line interface for non-deaf-mute persons (Paragraph 0016; it is two way communication)

Regarding claim 12, Bravin discloses, wherein selection information for selecting a sign language interpreter is registered in said sign language interpreter registration table (Fig. 6, el. 70) and said connection means includes a function to acquire the conditions for selecting a sign language interpreter from said calling terminal (Paragraph 0019 and 0040; i.e. if the caller party requests an interpreter with a special language) and a function to extract the terminal number of a sign language interpreter who

satisfies said extracted selection conditions from said sign language interpreter registration table (the portal system will connect the calling party to the interpreter that satisfied the condition in the personal communication preferences; Paragraph 0035-0037 and 0039).

Regarding claim 14, Bravin discloses, wherein said connection means includes a function to generate text messages to be respectively transmitted to the deaf-mute person terminal, non-deaf-mute person terminal and sign language interpreter terminal (Paragraph 0023; so both parties can communicate with each other using text messages through the portal system " see Fig. 3"; which take the text message through the interpreter first for any required converting before complete the connection between the first and the second device, " see Fig. 5")

and said communications means includes a function to synthesize said respective messages generated onto videos to be transmitted to said line interface for deaf-mute persons said line interface for non-deaf-mute persons and said line interface for sign language interpreters, respectively (col. 5, lines 11-13; so the recipient, which could be the deaf person or the non-deaf person or the interpreter could receive a text message and convert it to a video ).

Regarding claim 15, Bravin discloses, wherein said connection means includes a function to generate a voice message to be transmitted to said terminal for non-deaf-mute persons (Paragraph 0017); and said communications means includes a function to

synthesize said generated message onto an audio to be transmitted to said line interface for non-deaf-mute persons (Paragraph 0017).

Regarding claim 19, Bravin discloses, wherein said communications means includes a function to transmit a video obtained by synthesizing a video from said line interface for deaf-mute persons and a video from said line interface for non-deaf-mute persons to said line interface for sign language interpreters ( Paragraph 0030, Fig. 1, 3 and 5).

Regarding claim 21, a method for providing sign language interpretation in a conversation between a deaf-mute person and a non-deaf-mute person over a videophone (Fig. 1 and Paragraph 0018 and ) said method interconnecting a videophone terminal for deaf-mute persons used by a deaf-mute person capable of using sign language, a videophone terminal for non-deaf-mute persons used by a non-deaf-mute person incapable of using sign language (Paragraph 0015 and 0018) and a videophone terminal for a sign language interpreter used by the sign interpreter (Paragraph 0018; Fig. 5, el. 52 and Paragraph 0033, line 2) said method individually equipped with a line interface for deaf-mute persons to which a deaf-mute person terminal is to be connected (Fig. 2, el. 30 and 20), a line interface for non-deaf-mute persons to which a non-deaf-mute person terminal is to be connected (Fig. 2, el. 35 and 20), and a line interface for sign language interpreters to which a sign language interpreter terminal is to be connected (Fig. 5, el. 22), said method comprising:

a step of simultaneously performing steps of: synthesizing at least a video from



said line interface for non-deaf-mute persons and a video from said line interface for sign language interpreters and transmitting the resulting video to said line interface for deaf-mute persons (in Fig. 1 we have both the caller and the callee have video synthesization capabilities in two way communication through the interpreter; in Paragraph 0030; Bravin discloses that the communication between the caller and the callee could happen using any communication means associated with the communication device .i.e. video; in Paragraph 0018; Bravin teaches that the hearing person voices back to the deaf person through the interpreter who sign to the deaf person what he hears from the hearing person; therefore, based on Bravin suggestions of using the video mode that the hearing person contact the interpreter through a video connection and the interpreter will communicate, resulting video "i.e. translated voice into sign language" with the deaf person through video connection too using the portal system; Fig. 3).

transmitting at least a video from said line interface for deaf-mute persons and an audio from said line interface for sign language interpreters to said line interface for non-deaf-mute persons (Paragraph 0018)

and transmitting at least a video from said line interface for deaf-mute persons and an audio from said line interface for non-deaf-mute persons to said line interface for sign language interpreters (Paragraph 0018), and said method is equipped with a sign language interpreter registration table (Fig. 4, el. 70) where the terminal number of a sign language interpreter is registered (since the first and second device contact the interpreter through the portal system in order to complete a connection; it is necessary

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that the portal system has a registered number/address of the interpreter device;

Paragraph 0021 and 0022), said method including steps of:

accepting a call to said line interface for deaf-mute persons or said line interface for non-deaf-mute persons and connecting the calling terminal (Paragraph 0016)

prompting said calling terminal to enter the terminal number of the called terminal (Paragraph 0016)

extracting the terminal number of a sign language interpreter from said sign language interpreter registration table (based on the personal communication preferences table in Fig. 6, the portal system will contact the preferred interpreter terminal and connect the caller to that terminal; Paragraph 0036, 0037 and 0038)

calling and connecting the sign language interpreter terminal by using said extracted terminal number of the sign language interpreter from said line interface for sign language interpreters (Fig. 5, el. 20 and 22; the portal system based on the caller preferences will choose the interpreter and call and contact that terminal through the interface 22)

and calling and connecting the called terminal by using said acquired called terminal number, from said line interface for the non-deaf-mute person terminal in case said calling terminal is connected to the line interface for deaf-mute persons (Paragraph 0016), or from said line interface for the deaf-mute person terminal in case said calling terminal is connected to the line interface for non-deaf-mute persons (Paragraph 0016; it is two way communication).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bravin et al US ( 2003/0069997) in view of Watson US (6,570,963).

Regarding claim 13, Bravin discloses, a function to connect the called terminal to the sign language interpreter terminal

Bravin does not disclose, wherein an availability flag to indicate whether a sign language interpreter is available is registered in the sign language interpreter registration table; and said connection means includes a function to extract the terminal number of an available sign language interpreter by referencing the availability flags in the sign language interpreter registration table.

Watson discloses, wherein an availability flag to indicate whether a sign language interpreter is available is registered in the sign language interpreter registration table; and said connection means includes a function to extract the terminal number of an available sign language interpreter by referencing the availability flags in

the sign language interpreter registration table (col. 5, lines 45-45 and 56-64 and col. 6, lines 34-37)

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Bravin personal communications preferences table, with the teaching of Watson database, to include a field that identify the available interpreter, in order for the portal system to connect the caller to the available interpreter, so the system will perform in more efficient way.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bravin et al US (2003/0069997) in view of Liebermann et al US(2004/0034522) and in view of Giuntoli US (5,917,888).

Regarding claim 16, Bravin discloses, the sign language interpretation system equipped with a registration table (preferences table) used during a videophone conversation (Fig. 6), wherein said connection means include a function to detect a push on a dial pad at a terminal from said line interface for deaf-mute persons or said line interface for non-deaf mute person or said interface for sign language interpreter (Paragraph 0017 and Fig. 1; using the TRS) and that said communication means includes a function to detect a push on a dial pad at terminal from said line interface for deaf-mute persons or said line interface for non-deaf-mute persons or said line interface for sign language interpreter during videophone conversation (Paragraph 0017 and Fig.

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1; using TRS) and generate a telop (Paragraph 0035 and 0036; so spoken or sign language will display as a text on the display window "telop"), and a function to synthesize said generated telop onto a video to be transmitted to at least one of said line interface for deaf-mute persons, said line interface for non-deaf-mute persons and said line interface for sign language interpreter (Paragraph 0023, the text could be received in any form .i.e. video).

Bravin does not disclose the usage of term registration table, or the usage of audio as claimed.

Liebermann discloses, using TRS in a sign language communication method, and a canned messages "global canned messages or personal canned messages" stored in the apparatus that perform the method so that the user selects the phrase closest to his/her need and keys in the number next to it (on the unit or the phone keypad) . For example, if "travel" is associated with the number 3. When the user key in number 3, the display changes to show the phrase "travel" (Paragraph 0058), therefore, Liebermann teaches the usage of a term registration table.

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Bravin system to include the term registration table, as taught by Liebermann, in order to make the communication more convenient between the communicating parties.

Bravin in view of Liebermann does not disclose that the function that used to detect a push on a dial pad at a terminal is performed by way of an audio.

Gintoli provide evidence that TRS uses DTMF or audio tone to detect a push on dial pad (col. 4, lines 51-56).

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Bravin in view of Liebermann system to perform the detection of push on a dial pad in an audio way, as taught by Gintoli, in order to use standardized telephony communication means for greater compatibilities.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bravin et al US) in view of Ohki et al US (6,477,239).

Regarding claim 17, Bravin discloses, said communications means includes a function to transmit a video obtained by synthesizing one of a video from said line interface for non-deaf-mute persons and a video from said line interface for sign language interpreters to said line interface for deaf-mute persons (Fig. 1 and paragraph 0018 and 0030)

Bravin does not disclose, that the display window at the said interface for deaf-mute person has a main window to display a video obtained by synthesizing one of a video from said line interface for non-deaf-mute persons and a video from said line interface for sign language interpreters and the other as a sub window.

Ohki discloses, a function to transmit a video obtained by synthesizing one of a video from said line interface for non-deaf-mute persons and a video from said line

interface for sign language interpreters as a main window and the other as a sub window to said line interface for deaf-mute persons (Fig. 8 and col. 14, lines 16-34).

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Bravin communication method, to include main and sub window in the deaf person display device, as teaches by Ohki, in order for the deaf person to see the person who he communicate with and his expressions, and at the same time understand what this person says through the interpreter video in the sub window.

Regarding claim 18, Bravin discloses, said communications means includes a function to transmit a video obtained by synthesizing a video from said line interface for deaf-mute persons and a video from said line interface for sign language interpreters to said line interface for non-deaf-mute person (Fig. 1 and Paragraph 0018 and 0030)

Bravin does not disclose, that the non-deaf-mute person display window has a Main window to display a video for deaf-mute person and a sub window to display video from said line interface for sign language interpreters

Ohki disclose, said communications means includes a function to transmit a video obtained by synthesizing a video from said line interface for deaf-mute persons as a main window and a video from said line interface for sign language interpreters as a sub window (Fig. 17) to said line interface for non-deaf-mute person.

Therefore, it would have been obvious to one with ordinary skill in the art, at the

time the invention was made , to modify Bravin communication method, to include main and sub window in the non-deaf person display device ,as teaches by Ohki, in order for the non-deaf person to see the interpreter and the person who he communicate with and his expressions.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bravin et al US ( 2003/0069997) in view of Giuntoli US (5,917,888).

Regarding claim 20, Bravin discloses, said communications means includes a function to detect a push on a dial pad at a terminal during a videophone conversation from said line interface for deaf-mute persons or said line interface for non-deaf-mute persons or said line interface for sign language interpreters and change a method for synthesizing a video and/or an audio to be transmitted to the line interface in association with the number of the dial pad detected (Paragraph 0017 and Fig. 1; using the TRS).

Bravin does not disclose the usage audio as claimed.

Giuntoli provide evidence that TRS uses DTMF or audio tone (col. 4, lines 51-56), therefore, Giuntoli teaches the usage of audio as claimed.

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Bravin system to include an audio DTMF ,as taught by Giuntoli, in order to use standardized telephony communication means for grater compatibilities.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria El Zoobi whose telephone number is 571-270-3434. The examiner can normally be reached on Monday-Friday (8AM-5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hai Tran can be reached on 571-272-7305. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. E. //Maria El Zoobi/

Examiner, Art Unit 4178

/Hai Tran/

Supervisory Patent Examiner, Art Unit 2623

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